MEETING SUMMARY Alaska Mitigation Advisory Group Oil & Gas Sector Technical Work Group (OG TWG)

Call #3, July 31, 2008, 10:00am – 12:00noon

Attendance:

1. Technical Working Group members:

Janet Bounds Chevron

Russ Douglass Doyon Drilling

Claire Fitzpatrick BP Kip Knudson Tesoro

Louis Kozisek Alaska Joint Pipeline Office Sean Lowther Alaska Chugach Electric

John Norman Alaska Oil and Gas Conservation Commission

Bob Swenson Alaska Sub-cabinet member

Alex Post for Brad Thomas ConocoPhillips

Jeff Walker Alaska Minerals Management Service

Bob Batch BP

David Hite Independent consultant
Mike Munger Cook Inlet RCAC

2. Center for Climate Strategies (CCS) staff:

Alison Bailie

Greg Powell

Gloria Flora (for first part of call)

3. Alaska State Agency (DEC) Liaison and Attendees:

Jackie Poston

Background documents:

(all posted at http://www.akclimatechange.us/Oil_Gas.cfm)

- 1. Agenda
- 2. PowerPoint presentation for meeting
- 3. Draft Catalog of Mitigation Options
- 4. Mitigation Option Descriptions

Discussion items and key issues:

- 1. Alison Bailie explained that input from TWG members was incorporated into the catalog and descriptions that were posted for the call
- 2. TWG members provided revisions to the call summary from Call#2. These were recorded by CCS, a new call summary for Call#2 will be produced and TWG members will be asked to review at next call.
- 3. TWG discussed whether it would be useful to record names of speakers in posted call summaries. CCS suggested that they could record names as much as possible for internal purposes and to help resolve any potential questions but would not include names in call summaries that are posted to the website.
- 4. Feedback from Mitigation Advisory Group meeting: MAG was very impressed with the presentation; lack of new policies proposed by MAG is evidence of comprehensiveness of TWG input.
- 5. Feedback from MAG and TWG discussion:
 - a. growth of Alaska's jobs and economy are important but to be considered as criteria rather than policy options
 - b. Carbon capture reuse be considered for coal Energy Supply and Demand will consider. Jackie Poston noted that the ESD TWG had not discussed this option in the most recent TWG call. CCS facilitators to follow-up with ESD TWG facilitators to ensure option is still under consideration. TWG members that had attended the MAG meeting noted that MAG members saw CCSR as transcending individual TWGs. O&G TWG would be primary TWG to consider sequestration, primarily geologic sequestration. O&G TWG will note the question of TWG responsibility for CCSR under **research needs** in the call summary for Jackie to follow up with DEC staff.
 - c. Minutes from MAG meeting will be posted on-line in the near future
 - d. Version of catalog that is posted includes comments from MAG
- 6. Alison identified the next steps in the Climate Change Strategy process
 - a. Catalog includes 18 or 19 potential options. In Feb or March, want to have specific policy recommendations for the Governor. Need to identify 8-10 priority options for analysis, not necessarily recommendations at this point. Then, 3 or 4 TWG members will work to define and develop specific policy option. Need to set

priorities for shorter list by September. Examples of other states' processes will be posted on website.

- 7. TWG member asked for clarification on overall time frame? What is reason for time frame?
 - a. Jackie: set of recommendations to Sub-Cabinet so they have sufficient time to work on it and turn around to report to Governor's office. Sub-cabinet needs sufficient time. March/April is deadline.
 - b. September deadline is for MAG meetings, which were laid out in advance to feed into report to Sub-cabinet. September 22 is next MAG meeting; TWGs are to propose priority options for MAG's review and comment.
- 8. Inventory and forecast
 - a. Working to get finalized since important for setting priorities and possible emissions reductions
 - b. Historic oil and gas emissions have been estimated based on protocol developed by US EPA
 - i. Emissions from energy consumption is fairly certain based on analysis by AK DEC.
 - ii. Fugitive emissions have some uncertainty; need more information
 - iii. TWG members commented on "information for AK flaring...not directly assessed". AOGCC can provide report on flaring and venting of methane. DEC has similar data with focuses on air quality; AOGCC looks at it from perspective of waste of a valuable resource.
 - c. Jackie Poston asked for clarification on the process for revisions to the Inventory and Forecast. CCS will make revisions to I&F. DEC will assume responsibility of I&F. TWG facilitators (Greg and Alison) make revisions to I&F. Do all changes go through Alice Edwards? Yes, revisions must go through Alice. Keep list of revisions to I&F, have Alice review before sharing with TWG. Document revisions clearly before making changes to final calculations and document. Aiming to complete refinements by December. No changes will be made until approved by DEC.
 - i. Greg and Alison keep list of potential revisions based on new information from TWG members and other sources. As appropriate, will make preliminary calculations to estimate the extent of changes to the draft I&F values.
 - ii. Revisions will be passed to Alice Edwards for discussion and approval. No changes will be made to I&F without Alice Edwards' approval
 - iii. Goal is to have refinements completed by December
 - d. 2002 data are provided in powerpoint in annual emissions in million metric tonnes of CO2 equivalents.

i. Key uncertainties:

- 1. Emissions factors for fugitive emissions
- 2. Refinery production TWG member to follow up on whether this information is collected at state agency
- 3. Energy consumption numbers were pulled together by DEC.
 - a. Don't have estimate for non-title V
 - b. TWG member noted that AOGCC is taking a look at MG1 activities. Member will find out whether more information is available.
- e. TWG members suggested using Department of Revenue projections for reference case. TWG member offered to send link to Revenue source book from to Department of Revenue website.
- f. Discussion on alternative source scenario. The following comments reflect the different points and suggestions provided by different TWG members.
 - i. That they are receiving calls for information on potential development opportunity in ANWR. % of oil produced by US has shrunk to 36-38%; remainder is imported
 - ii. DOR projections are for oil that is produced from current sites. Lot of alternative assumptions are discussed for oil development. Difficult to make alternative projections, depends on price of commodity, which is facing large uncertainty.
 - iii. Suggestion to focus on current production, not sure why TWG is discussing scenarios.
 - iv. Scenarios are a means to consider reductions commitments is to make assumptions into the future. Must account for growth in business as usual such as increased number of cars in Alaska.
 - v. Forecasting oil production is more speculative than trying to estimate vehicles on road.
 - vi. Must look forward. Need to agree on assumptions; consider for future, not solve now.
 - vii. Perhaps best to present numbers with error bars, use best available data with expected minima and maxima.
 - viii. Agencies and land owners have numbers on undiscovered resources
 - ix. Resources assessments of technically recoverable are widely.
 - x. Focus on intensity? Estimate tons GHG emissions per barrel and set goals based on that when considering new policies. Alberta Canada uses intensity basis

- xi. Intensity basis could invite bench-marking against other jurisdictions, for better or for worse → could compare emissions intensity of a barrel produced in Alaska to the emissions intensity of a barrel produced elsewhere. Arctic may be more energy intensive plus energy intensity of producing in old field versus new field could differ significantly.
- xii. TWG member agreed to draft paragraph on using intensity rather than absolute basis
- xiii. Jackie agreed to discuss intensity basis with Commissioner
- 9. Priorities for analysis for which catalog options do we want to consider policy options. Not recommending policy recommendations, just prioritizing on which we want to consider for policies.
 - a. In other state processes, Each TWG member has applied his or her own criteria when setting priorities: reductions potential, cost, effect on economy and jobs, overlap with other federal policies.
 - b. Jackie pointed out that the MAG meeting had included discussion on having all TWGs agree upon same set of criteria.
 - c. Schedule a new call to discuss criteria
 - d. TWG members to send criteria to CCS; CCS to compile into ppt. CCS to jump-start process with proposals of what was used in other states. TWG members to include comments in body of email (not attachments).

Next steps and agreements:

- Provide suggestions for criteria for setting priorities for options to be analyzed.
- Review inventory & forecast, consider use of intensity as alternative to a high growth scenario

Research needs:

- Fugitive emissions from pipelines, range of emission factors
- CCSR for coal, responsibility of relevant TWGs
- How many drill rigs are permitted under MG1? TWG member to follow-up.

Next meeting:

August 13, 2008, 10am-12noon (tentative) August 28, 2008, 10am-12noon (tentative)